R E P O R T R E S U M E S

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A PARTIAL ASSESSMENT OF THE WILL C. WOOD JUNIOR HIGH SCHOOL NONGRADED PLAN OF ORGANIZATION.

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THE NONGRADED PLAN OF SCHOOL ORGANIZATION PUT INTO EFFECT AT SACRAMENTO'S WILL C. WOOD JUNIOR HIGH SCHOOL IN 1964 WAS EVALUATED AND COMPARED WITH GRADED PROGRAMS AT OTHER SCHOOLS BY MEANS OF STANDARDIZED TESTS AND TEACHER OPINIONS. THE POPULATION OF THE STUDY CONSISTED OF THREE PUPIL GROUPS--(1) 212 PUPILS WHO WERE IN THE SEVENTH GRADE DURING THE 1964-65 SCHOOL YEAR AND IN THE EIGHTH GRADE THE NEXT YEAR, (2) 223 PUPILS WHO WERE IN THE EIGHTH GRADE DURING THE 1964-65 SCHOOL YEAR AND IN THE NINTH GRADE THE NEXT YEAR, AND (3) THE PUPILS IN THE SECOND GROUP WHO COULD BE MATCHED WITH COMPARABLE PUPILS IN GRADED JUNIOR HIGH SCHOOLS. THESE THREE GROUPS WERE TESTED IN TERMS OF PUPIL ACHIEVEMENT AND ATTENDANCE. THE FOLLOWING RESULTS WERE NOTED--(1) THE ACADEMIC STATUS OF THE FIRST TWO GROUPS REMAINED VIRTUALLY THE SAME UNDER THE NONGRADED PLAN, (2) THE GAINS MADE BY THE GRADED PUPILS IN THE MATCHED PAIR GROUP EXCEEDED THOSE MADE BY THE NONGRADED PUPILS, (3) ATTENDANCE DID NOT DECREASE AS A RESULT OF THE NONGRADED PROGRAM, AND (4) TEACHERS GENERALLY AGREED WITH THE THEORY OF THE NONGRADED PLAN, AND MOST FELT THAT IT WAS A VALUABLE ADDITION TO THE JUNIOR HIGH SCHOOL. (HW)

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Topic: A PARTIAL ASSESSMENT OF THE WILL C. WOOD JUNIOR HIGH SCHOOL NONGRADED PLAN OF ORGANIZATION.

Introductory Statements

The nongraded plan of junior high school organization is designed to provide a more effective program of education than the traditional graded plan of organization. The subject matter, skills, and concepts to be mastered in junior high school in reading and arithmetic are divided into convenient, logical, and sequential units of work called phases. Each phase is a continuum of work with a varying time element. Each phase is dependent upon previous learning, and a pupil progresses to the next phase only after he has succeeded on an achievement test for his current phase. Pupils are grouped initially on the basis of their stage of development, rate of achievement, background of experience, and emotional adjustment rather than chronological age or grade. Brighter pupils are encouraged to move ahead regardless of grade level, and slower pupils are not forced to attempt to keep up with standards beyond their capabilities. This plan of continuous progress attempts to reduce frustration for the slower pupil while providing an atmosphere of challenge for the brighter pupil.

On May 25, 1964, the Board of Education approved a pilot program for a nongraded plan of organization in reading and arithmetic at the Will C. Wood Junior High School. This program went into effect in September 1964. The Planning and Research Services Office conducted a study of this program during the 1966-67 school year. This study was conducted in terms of pupil achievement, pupil attendance, teacher attitudes and opinions of the program, and teacher evaluation of pupil attitudes and interests. This report contains a summary of that study.

Sources of Data

The standardized tests used in the study were the School and College Ability Tests (SCAT) and the Sequential Tests of Educational Progress (STEP); subtests in reading, writing, and mathematics.

A. SCAT-STEP testing provided individual pupil converted scores for the following times.

   1. Special testing at Will C. Wood Junior High School.

      a. Fall 1964, Low 7th grade pupils.

      b. Spring 1966, High 9th grade pupils.

   2. Special testing at Joaquin Miller Junior High School, Kit Carson Junior High School, Peter Lassen Junior High School, and Sutter Junior High School.

      a. Spring 1966, High 9th grade pupils.

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Sources of Data (continued)

b. This was a part of the special testing for the follow-up study of former Stanford Junior High School pupils.

3. Regular state testing program.

a. Fall 1964, Low 8th grade pupils.

b. Fall 1965, Low 8th grade pupils.

B. Summary attendance reports for the junior high school for the 1964-65 and 1965-66 school years prepared by the Management Information Services Department of the Business Services Office.

C. A teacher questionnaire (see Exhibit 1) completed in May of 1966 by Will C. Wood Junior High School teachers directly involved in the nongraded program.

Methods of Procedure

A. Selection of the experimental and control groups.

1. Three experimental groups of pupils were selected from Will C. Wood Junior High School.

a. Experimental Group A consisted of those 7th grade pupils who completed all parts of the SCAT-STEP testing in the fall of 1964 and all parts of the SCAT-STEP testing as 8th grade pupils in the fall of 1965.

b. Experimental Group B consisted of those 8th grade pupils who completed all parts of the SCAT-STEP testing in the fall of 1964 and all parts of the SCAT-STEP testing as 9th grade pupils in the spring of 1966.

c. Experimental Group B_1 consisted of those pupils in Experimental Group B who could be matched suitably in the fall of 1964 with 8th grade pupils from comparable graded junior high schools.

2. Selection of the control group.

Control Group MB_1 consisted of those pupils from Joaquin Miller Junior High School, Kit Carson Junior High School, Peter Lassen Junior High School, and Sutter Junior High School who were suitable matches for the pupils in Experimental Group B_1 and who completed all SCAT-STEP testing as 8th grade pupils in the fall of 1964 and as 9th grade pupils in the spring of 1966.

3. Matching

The pupils of Experimental Group B_1 and Control Group MB_1 were matched on a one-to-one basis with age, sex, ability (as measured by the SCAT in the fall of 1964) and reading level (as measured by the STEP subtest in reading in the fall of 1964) as the matching criteria. Whenever possible, ethnic classification was used as a factor in the matching criteria.

Methods of Procedure (continued)

B. Treatment of attendance.

The Management Information Services Department provided pupil listings stating the per cent of days attended by each pupil. These data were treated in the following manner for each of the Experimental Groups A and B.

1. Frequency distributions of the per cent of days attended during the 1964-65 and 1965-66 school years were compiled.

2. The average per cent of days attended was computed for each of the two years.

3. A t-test was applied to the difference in averages to determine the significance of the difference in attendance for the two years.

$$t = \frac{M_1 - M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

C. Treatment of test scores.

The Management Information Services Department provided pupil listings with converted test scores for each of the testing periods. These data were treated as follows.

1. Experimental Group A (7th grade, 1964-65).

The growth made by the pupils in Experimental Group A during the 1964-65 school year was determined by pre and post SCAT-STEP testing.

a. The initial testing was done in the fall of 1964 and the final testing in the fall of 1965.

b. The pupils were compared in terms of mean converted scores and mean percentile ranks for the ability test (SCAT) and the three achievement tests (reading, writing, and mathematics STEP subtests).

2. Experimental Group B (8th grade, 1964-65).

The growth made by the pupils in Experimental Group B during the 1964-65 and 1965-66 school years was determined by pre and post SCAT-STEP testing.

a. The initial testing was done in the fall of 1964 and the final testing in the spring of 1966.

b. The pupils were compared in terms of mean converted scores and mean percentile ranks for the ability test (SCAT) and the three achievement tests (reading, writing, and mathematics STEP subtests).

Methods of Procedure (continued)

3. Experimental Group B_1 and Control Group MB_1 (8th grade, 1964-65).

The pupils of Experimental Group B_1 and Control Group MB_1 were compared in terms of the mean differences in gains in converted scores on the SCAT-STEP tests from the fall of 1964 to the spring of 1966.

a. The converted scores for the pre and post tests for the matched pairs were key punched into cards and processed by the Management Information Services Department to provide a t-test for the significance of the mean difference in gains made by the nongraded and graded pupils during the two year period.

$$t = \frac{\bar{D}}{S_{\bar{D}}}, \text{ where}$$

$\bar{D}$ is the mean difference in gains

$S_{\bar{D}}$ is the standard error of mean difference in gains

b. The mean converted scores and mean percentile ranks were also determined for comparative purposes.

D. Treatment of the teacher questionnaire.

The responses to the questionnaire items were tallied, counted and analyzed in the Planning and Research Services Office.

Explanation of Terms

A. Percentile. One popular way of comparing the test scores of a group of pupils to the national norm group is by means of percentiles. The percentile equivalent of a pupil's score indicates the per cent of pupils whose scores are lower than the score in question. Thus, if a pupil's test score was found to be at the 54th percentile, that pupil scored better than 54% of the pupils in the norm group.

There are two primary reasons for using percentiles in reporting test results. The first reason is to give some indication of the general level of a score in relation to a known population. The second reason is to put scores from different tests on a comparable basis. A given test score may not indicate the same degree of success on two different tests while a given percentile value does indicate the same degree of success on different tests.

B. t-ratio. Data gathered at the same time for different groups or gathered at different times for the same group are often compared and differences are noted. When these differences are large, it is usually easy to make judgements regarding the significance of the differences. However, when

the groups are small or the differences slight or moderate, such judgements are usually not possible. This is because the differences may have occurred only by chance and the judgements must be based upon subjective opinions regarding what constitutes slight, moderate, or large differences.

A statistical test commonly employed in such situations to determine the significance of such differences is the computation of a "critical ratio." This is accomplished by dividing the difference between the sample means by its standard error. In some instances this is referred to as a "t-test" or a "t-ratio." The t-ratio can then be read into a statistical table developed for this purpose to determine the significance of the difference noted.

C. Level of significance. When the t-ratio is read into an appropriate statistical table, a decimal figure is gained which is known as the level of significance. This decimal figure is related to the laws of probability and expresses the degree to which the differences noted between groups (or the same group at different times) may have happened by chance. For example, if the level of significance was found to be .20, it might be interpreted that the difference noted would occur by chance 20 times out of 100. This might also be expressed as having a 20 per cent level of confidence. This, usually, is not considered a high level of significance and differences noted at this level of confidence normally would be considered insignificant or inconclusive. Findings of differences at the .001, .01, .02, and .05 levels of significance are usually required before they are judged as conclusive.

TABLE I

DISTRIBUTION, ACCORDING TO PER CENT OF DAYS IN ATTENDANCE, OF WILL C. WOOD JUNIOR HIGH SCHOOL PUPILS WHO WERE IN THE SEVENTH GRADE DURING THE 1964-65 SCHOOL YEAR AND IN THE EIGHTH GRADE DURING THE 1965-66 SCHOOL YEAR (EXPERIMENTAL GROUP A)

Percent of Days in Attendance	Number of Pupils	
	1964-65	1965-66
99-100	46	23
97-98	52	51
95-96	41	28
93-94	27	28
91-92	19	22
89-90	8	21
87-88	7	13
85-86	5	9
83-84	2	4
81-82	3	6
79-80	1	2
77-78		1
75-76		
73-74		2
71-72		
69-70		2
67-68		
65-66		
63-64		
61-62		
59-60		
57-58		
55-56		
53-54		
51-52		
49-50	1	
Total	212	212
Mean	94.92	92.92
Standard Deviation	5.22	5.68
$M_1 - M_2$	-2.0	
t-ratio	-3.7736	
Level of Significance	0.001	

Findings

A. Experimental Group A

This group consisted of those Will C. Wood Junior High School pupils who completed the SCAT-STEP testing as seventh grade pupils in the fall of 1964 and as eighth grade pupils in the fall of 1965. A total of 212 pupils was included in this group.

1. Attendance

Frequency distributions, in terms of the per cent of days attended, were compiled for these pupils for the 1964-65 and 1965-66 school years. The mean per cent of days attended was computed for each year and a t-test was applied to the difference in means to determine the significance of the difference. These data are presented in Table I. The following observations may be made from these data:

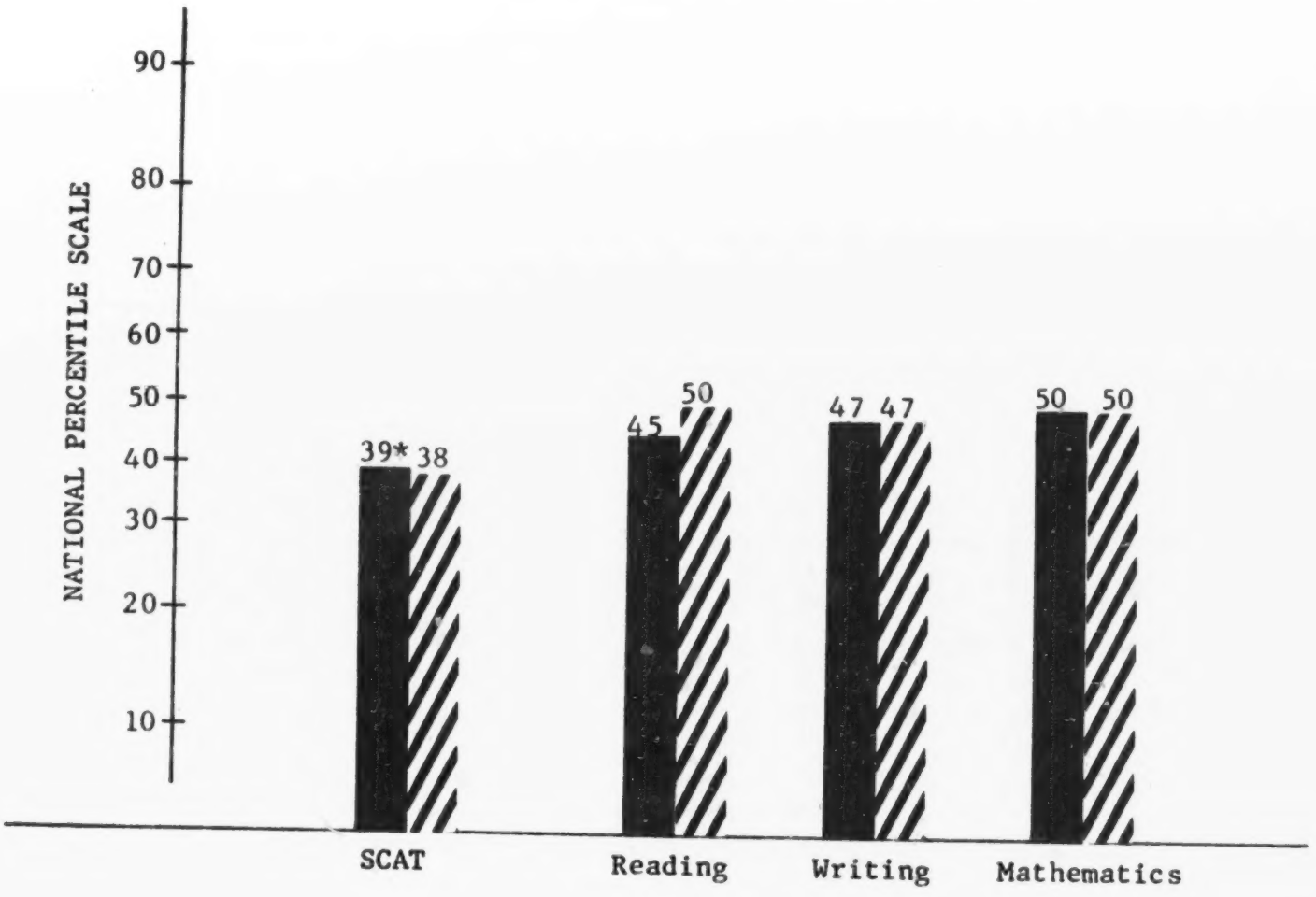
a. The average per cent of days attended by these pupils in the eighth grade was 2% less than the average for these pupils in the seventh grade.

b. This difference was, statistically, highly significant. However, a random sample of 200 junior high school pupils of the same grade levels throughout the district showed a decrease of 1.5% for the same time periods.

c. This trend displayed by the district sample would suggest that the decrease in the rate of attendance for these pupils at the Will C. Wood Junior High School was not solely a result of the nongraded plan of organization.

CHART 1

AVERAGE ABILITY AND ACHIEVEMENT TEST SCORES FOR WILL C. WOOD JUNIOR HIGH SCHOOL PUPILS WHO WERE IN THE SEVENTH GRADE DURING THE 1964-65 SCHOOL YEAR, AND IN THE EIGHTH GRADE DURING THE 1965-66 SCHOOL YEAR (EXPERIMENTAL GROUP A)



*Percentile Rank

STEP

LEGEND
Fall, 1964
Fall, 1965

Findings (continued)

2. Pupil Achievement

These pupils completed the SCAT-STEP testing in the fall of 1964 and in the fall of 1965, thus their progress was measured for the 1964-65 school year.

The mean converted scores and mean percentile ranks for these pupils on the SCAT and each of the STEP subtests are reported in Table II and shown graphically in Chart 1. The following observations may be made from these data:

a. The pupils in Experimental Group A tested below average in ability and about average in all three achievement areas for both the pre and post tests.

b. The only noticeable change was an increase from the 45th to 50th * percentile in reading achievement.

TABLE II

AVERAGE ABILITY AND ACHIEVEMENT TEST SCORES FOR WILL C. WOOD JUNIOR HIGH SCHOOL PUPILS WHO WERE IN THE SEVENTH GRADE DURING THE 1964-65 SCHOOL YEAR AND IN THE EIGHTH GRADE DURING THE 1965-66 SCHOOL YEAR (EXPERIMENTAL GROUP A)

			Fall 1964	Fall 1965
Number			212	212
Scat		Mean Converted Score	263.18	268.71
		Mean Percentile Rank	39	38
STEP	Reading	Mean Converted Score	262.41	269.55
		Mean Percentile Rank	45	50
	Writing	Mean Converted Score	258.93	263.93
		Mean Percentile Rank	47	47
	Mathematics	Mean Converted Score	254.59	260.93
		Mean Percentile Rank	50	50

* Since the percentile equivalents of the mean converted scores are approximations, the interpretation of the percentile equivalents in this table and the other tables of this report should be approached with caution. For example, if the 1965 mean converted score for reading had been 0.1 of a score lower, the percentile equivalent would have been the 45th rather than the 50th.

TABLE III

DISTRIBUTION, ACCORDING TO PER CENT OF DAYS IN ATTENDANCE, OF WILL C. WOOD JUNIOR HIGH SCHOOL PUPILS WHO WERE IN THE EIGHTH GRADE DURING THE 1964-65 SCHOOL YEAR AND IN THE NINTH GRADE DURING THE 1965-66 SCHOOL YEAR (EXPERIMENTAL GROUP B)

Per Cent of Days in Attendance	Number of Pupils	
	1964-65	1965-66
99-100	45	31
97-98	49	48
95-96	38	27
93-94	26	33
91-92	16	25
89-90	13	15
87-88	15	12
85-86	7	12
83-84	7	4
81-82	2	7
79-80	1	4
77-78	2	1
75-76	1	2
73-74		1
71-72		1
69-70	1	
Total	223	223
Mean	94.08	92.96
Standard Deviation	5.32	5.78
$M_1 - M_2$	-1.12	
t-ratio	-2.1293	
Level of Significance	0.04	

Findings (continued)

B. Experimental Group B

This group was composed of those Will C. Wood Junior High School pupils who completed the SCAT-STEP testing as eighth grade pupils in the fall of 1965 and as ninth grade pupils in the spring of 1966. A total of 223 pupils was included in this group.

1. Attendance

Frequency distributions in terms of the per cent of days attended were compiled for these pupils for the 1964-65 and 1965-66 school years. The mean per cent of days attended was computed for each year, and a t-test was applied to the difference in means to determine the significance of the differences. These data are presented in Table III. The following observations may be made from these data:

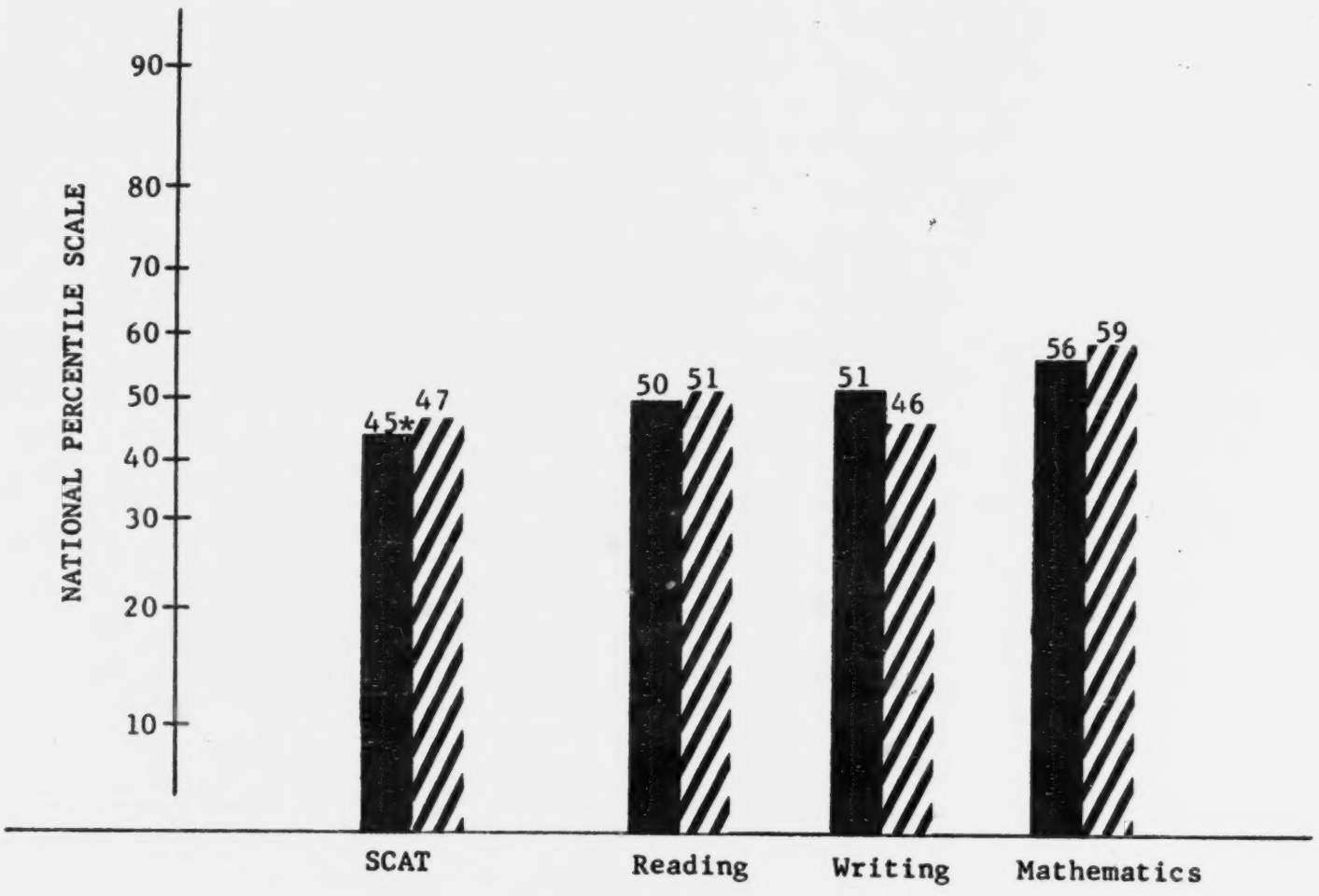
a. The average per cent of days attended by these pupils in the ninth grade was 1.12% less than the average for these pupils in the eighth grade.

b. This difference was statistically significant. However, a random sample of 200 junior high school pupils of the same grade levels throughout the district showed a decrease of 1.47% for the same time periods.

c. This trend displayed by the district sample indicates that although the attendance of these Will C. Wood pupils decreased significantly, the decrease was less than that experienced throughout the district at these grade levels over the same period.

CHART 2

AVERAGE ABILITY AND ACHIEVEMENT TEST SCORES FOR WILL C. WOOD JUNIOR HIGH SCHOOL PUPILS WHO WERE IN THE EIGHTH GRADE DURING THE 1964-65 SCHOOL YEAR AND IN THE NINTH GRADE DURING THE 1965-66 SCHOOL YEAR (EXPERIMENTAL GROUP B)



* Percentile Rank

STEP

LEGEND
Fall, 1964
Spring, 1966

Findings (continued)

2. Pupil Achievement

These pupils completed the SCAT-STEP testing in the fall of 1964 and the spring of 1966, thus their progress was measured for the 1964-65 and 1965-66 school years.

The mean converted scores and mean percentile ranks for these pupils on the SCAT and each of the STEP subtests are reported in Table IV and shown graphically in Chart 2. The following observations may be made from these data:

a. The pupils in Experimental Group B tested about average in ability for both the pre and post tests.

b. In terms of achievement, these pupils tested about average in reading and writing and above average in mathematics for both the pre and post test.

c. These pupils showed a slight increase in all areas except writing where they dropped from the 51st percentile in 1964 to the 46th percentile in 1966.

TABLE IV

AVERAGE ABILITY AND ACHIEVEMENT TEST SCORES FOR WILL C. WOOD JUNIOR HIGH SCHOOL PUPILS WHO WERE IN THE EIGHTH GRADE DURING THE 1964-65 SCHOOL YEAR AND IN THE NINTH GRADE DURING THE 1965-66 SCHOOL YEAR (EXPERIMENTAL GROUP B)

			Fall 1964	Spring 1966
Number			223	223
SCAT		Mean Converted Score	269.68	276.38
		Mean Percentile Rank	45	47
STEP	Reading	Mean Converted Score	269.54	280.48
		Mean Percentile Rank	50	51
	Writing	Mean Converted Score	266.01	272.82
		Mean Percentile Rank	51	46
	Mathematics	Mean Converted Score	262.50	269.27
		Mean Percentile Rank	56	59

TABLE V

A COMPARISON OF SCAT-STEP SCORES FOR WILL C. WOOD JUNIOR HIGH SCHOOL NONGRADED PUPILS (GROUP B_1) AND MATCHED JUNIOR HIGH SCHOOL GRADED PUPILS (GROUP MB_1) FROM THE FALL OF 1964 (8TH GRADE) TO THE SPRING OF 1966 (9TH GRADE)

N = 192 Matched Pairs		SCAT (Ability)		STEP (Achievement)					
				Reading		Writing		Mathematics	
		Nongraded Pupils B_1	Graded Pupils MB_1	Nongraded Pupils B_1	Graded Pupils MB_1	Nongraded Pupils B_1	Graded Pupils MB_1	Nongraded Pupils B_1	Graded Pupils MB_1
1964	Mean Converted Score	270.1	270.0	270.2	270.2	266.2	267.2	263.2	262.8
	Percentile Rank of Mean Converted Score	45	45	50	50	51	51	56	56
1966	Mean Converted Score	276.9	278.3	281.0	282.2	272.9	277.7	269.8	271.0
	Percentile Rank of Mean Converted Score	47	53	51	55	46	61	64	64
Gains in Means		+6.8	+8.3	+10.8	+12.0	+6.7	+10.5	+6.6	+8.2
Differences in Gains		-1.5		-1.2		-3.8		-1.6	
Sum of Differences in Gains (ΣD)		-288		-245		-727		-312	
Mean Difference in Gains ($\bar{D}$) $\left[\frac{\Sigma D}{N}\right]$		-1.49		-1.27		-3.78		-1.62	
Standard Deviation of the Differences in Gains (S_D) $\left[\frac{1}{N}\sqrt{N\Sigma D^2 - (\Sigma D)^2}\right]$		7.19		13.82		15.60		11.96	
Standard Error of Mean Differences in Gains ($S_{\bar{D}}$) $\left[\frac{S_D}{\sqrt{N-1}}\right]$		0.52		1.00		1.13		.86	
t-ratio $\left[\frac{\bar{D}}{S_{\bar{D}}}\right]$		-2.865		-1.270		-3.345		-1.884	
Level of Significance		.005		N.S.		.001		.06	

Findings (continued)

C. Experimental Group B_1 and Matched Control Group MB_1

1. Nature of the sample

The pupils in Experimental Group B_1 were matched on a one-to-one basis with the pupils in Control Group MB_1. The primary characteristics for matching were age, sex, ability (as measured by the SCAT in the fall of 1964) and reading level (as measured by the STEP in the fall of 1964). Whenever possible, ethnic classification was also used, however 26 (13.5%) of the 192 matched pairs are mixed with respect to ethnic classification.

2. Comparison of SCAT-STEP test scores

These pupils completed the SCAT-STEP testing as 8th grade pupils in the fall of 1964 and as 9th grade pupils in the spring of 1966, thus their progress is compared for the 1964-65 and 1965-66 school years. This comparison of test scores is presented in Table V, and examination of these data reveals the following:

a. The gains made by the graded pupils (Group MB_1) exceeded those made by the nongraded pupils (Group B_1) in ability and all three areas of achievement.

b. The differences in gains were highly significant in favor of the graded pupils in ability and writing and significant in mathematics, again favoring the graded pupils.

c. The difference in gains in reading was not at a significant level.

TABLE VI

THE NUMBER AND PER CENT OF RESPONSES BY SELECTED WILL C. WOOD JUNIOR HIGH SCHOOL TEACHERS CONCERNING THEIR ATTITUDES TOWARD THE NONGRADED PLAN OF ORGANIZATION

WHAT ARE YOUR OPINIONS REGARDING THE FOLLOWING STATEMENTS AS THEY PERTAIN TO NON-GRADED GROUPING FOR THE JUNIOR HIGH SCHOOL, FROM A THEORETICAL POINT OF VIEW?	True		Generally True		Undecided		Generally False		False	
	No.	%	No.	%	No.	%	No.	%	No.	%
1. Pupils who advance at their own learning rates should experience greater subject achievement.	6	54.5	4	36.4					1	9.1
2. Students can be assigned a performance level, which indicates their achievement rate.	5	45.4	5	45.5					1	9.1
3. Continuous progress related to a pupil's ability eliminates undue pressure and produces a relaxed learning environment conducive to good mental health.	7	63.6	2	18.2	2	18.2				
4. The steady growth keeps the slow achieving student from becoming frustrated and continuously challenges the talented ones, thus eliminating many behavior problems.	4	36.4	4	36.3	1	9.1	2	18.2		
5. Teaching under a non-graded plan is more challenging and satisfying.	3	27.3	2	18.2	6	54.5				

Findings (continued)

D. Analysis of the teacher questionnaire.

Questionnaires were sent to 15 Will C. Wood Junior High School teachers of English and mathematics in May of 1966. 11 (73.3%) of the teachers returned their questionnaires to the Planning and Research Services Office. The responses to the questionnaire items were tabulated and analyzed by the Planning and Research Services Office.

The median number of years of experience at Will C. Wood was 1.5 years, and the median number of years of teaching experience was 4.5 years. 6 of the teachers responding were male and 4 were female. One did not respond to this item. The following departments were represented: English (5), social studies (2), mathematics (2), counselor (1). The respondents indicated the following undergraduate majors: English (5), social studies (3), elementary education (1).

1. Attitudes concerning some theoretical considerations regarding a nongraded plan of junior high school organization.

The number and per cent of responses concerning teacher attitudes toward a nongraded plan of junior high school organization are presented in Table VI. The following observations may be made from these data:

a. Most of the teachers felt the statements regarding the philosophy of a nongraded plan were true.

b. One exception was the statement regarding the challenge and satisfaction of teaching under a nongraded plan. Over one-half (54.5%) of the respondents were undecided on this point after two years of experience with such a program.

TABLE VII

THE NUMBER AND PER CENT OF RESPONSES BY SELECTED WILL C. WOOD JUNIOR HIGH SCHOOL TEACHERS CONCERNING THE SUCCESS OF THE NONGRADED PLAN COMPARED TO THEIR EXPERIENCE WITH A GRADED PLAN OF ORGANIZATION

	Much More Successful		More Successful		About the Same		Less Successful		Much Less Successful	
	No.	%	No.	%	No.	%	No.	%	No.	%
1. Student initiative and independent study habits.										
a. for low achieving (remedial) pupils	2	18.2	3	27.3	5	45.4			1	9.1
b. for below average achieving (goal 2) pupils	1	9.1	4	36.4	4	36.3	2	18.2		
c. for average achieving (goal 3) pupils			5	45.5	6	54.5				
d. for high achieving (goal 4) pupils	5	45.4	4	36.4	2	18.2				
2. Student achievement in your teaching area.										
a. for low achieving (remedial) pupils	2	20.0	1	10.0	5	50.0	1	10.0	1	10.0
b. for below average achieving (goal 2) pupils	1	10.0	4	40.0	3	30.0	2	20.0		
c. for average achieving (goal 3) pupils	1	10.0	4	40.0	5	50.0				
d. for high achieving (goal 4) pupils	6	60.0	2	20.0	2	20.0				
3. The initial assignment of students to appropriate levels at the beginning of each semester.	2	20.0	2	20.0	5	50.0			1	10.0
4. Flexibility regarding the reassignment of pupils when it seems advisable.	1	9.1	4	36.4	4	36.3	1	9.1	1	9.1
5. Student self-confidence and feeling of self-worth.			5	50.0	5	50.0				
6. Pupil attitudes toward school in general.	1	9.1	2	18.2	8	72.7				
7. The cooperation of the class as a whole.	1	10.0	2	20.0	6	60.0			1	10.0
8. The student's attention to his individual work.			3	30.0	6	60.0			1	10.0
9. Your planning and communication with other staff members.	1	9.1	6	54.5	4	36.4				
10. Your feelings of accomplishment.	1	9.1	4	36.4	4	36.3	1	9.1	1	9.1

Findings (continued)

2. Teacher evaluation of the success of the nongraded program.

The number and per cent of responses concerning teacher evaluation of the nongraded plan are presented in Table VII. The teachers were to compare the success of the nongraded plan with their experience under a graded plan of junior high school organization. The following observations may be made from Table VII.

a. In terms of student initiative, independent study habits and student achievement (Questions 1 and 2), the teachers felt the nongraded plan was most successful for high achieving pupils.

b. 63.6% of the teachers felt they were more successful in planning and communicating with other staff members (Question 9).

c. 72.7% of the teachers indicated pupil attitudes toward school in general (Question 6) were about the same under both the graded and nongraded plans.

d. 54.5% of the responding teachers indicated the nongraded program did not provide more flexibility regarding the reassignment of pupils when it seems advisable (Question 4).

e. A small number of teachers indicated that their experiences had not been as successful under the nongraded plan in some areas as it had been under a graded plan or organization.

Findings (continued)

3. Teacher opinions regarding the nongraded plan.

   a. The teachers were asked to list the advantages of the nongraded program. The following list is a summary of these comments.

      (1) 6 of the respondents indicated allowing pupils to move at their individual rates was an advantage.

      (2) 3 comments indicated the ability and achievement grouping was an advantage.

      (3) 3 of the teachers indicated the nongraded program made teachers more aware of pupil needs and/or created more teacher interest in the instructional program.

   b. The teachers were asked to list the disadvantages of the nongraded program. The following list summarizes these responses.

      (1) 5 of the teachers felt that it was difficult to maintain a reasonably small number of groups to allow effective teaching.

      (2) 5 of the teachers indicated that pupils tend to become lazy and cannot or will not work by themselves.

      (3) 4 of the respondents felt the burden of the nongraded plan was too demanding of the teacher.

   c. The teachers were asked to respond to the question, "In your opinion is the nongraded program a valuable addition to the junior high school program?"

      4 respondents indicated yes, 2 indicated no, and 5 indicated yes, with revisions. The following suggestions were made by those indicating no or yes, with revisions.

      (1) Improved programming and ease of transfer - increase flexibility.

      (2) Smaller classes.

      (3) Better grouping.

      (4) More standardized materials.

Summary

This study was concerned with the success of the nongraded plan of organization at Will C. Wood Junior High School. It was conducted in terms of pupil achievement, attendance, and teacher opinions of the program. Three groups of Will C. Wood Junior High School pupils were involved in the study. The first group consisted of 212 pupils who were in the seventh grade during the 1964-65 school year and in the eighth grade during the 1965-66 school year. The second group consisted of 223 pupils who were in the eighth grade during the 1964-65 school year and in the ninth grade during the 1965-66 school year, and the third group consisted of the pupils in the second group who could be matched with comparable pupils in graded junior high schools.

The academic status of the first group remained virtually the same after one year under the nongraded plan (Table II). The same was true of the second group after two years under the nongraded plan (Table IV). The gains made by the graded pupils in the matched pair group exceeded those made by the nongraded pupils in ability and all three areas of achievement; reading, writing, and mathematics. The differences in gains were at significant levels in ability, writing, and mathematics (Table V). The gains were measured over a two year period.

The attendance for the Will C. Wood Junior High School pupils decreased significantly from the 1964-65 to the 1965-66 school year (Tables I and III), but a random sample of junior high school pupils from throughout the district displayed similar decreases. This district trend would suggest the decrease at Will C. Wood was not a result of the nongraded program.

The teachers responding to the questionnaire regarding the Will C. Wood Junior High School nongraded program generally agreed with the theory of the nongraded plan (Table VI). However, the only areas where the nongraded plan was judged more successful than a graded plan by more than one-half of the respondents were planning and communication with staff and student achievement, initiative and study habits for high achieving pupils (Table VII). Only 4 of the 11 teachers responding felt the nongraded plan was a valuable addition to the junior high school, and 5 felt that it could be with revisions. Two of the respondents indicated it was not a valuable addition.

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NON-GRADED JUNIOR HIGH QUESTIONNAIRE

This questionnaire was developed to assist in obtaining teacher opinions of various aspects of the non-graded organization. Your assistance by providing your responses to the questions will be appreciated. Please make additional comments if you so desire. You are not asked to sign the questionnaire. Please return this questionnaire in the attached pre-addressed envelope to the Planning and Research Services Office through the school mails by May 27, 1966. Thank you.

WHAT ARE YOUR OPINIONS REGARDING THE FOLLOWING STATEMENTS AS THEY PERTAIN TO NON-GRADED GROUPING FOR THE JUNIOR HIGH SCHOOL, FROM A <u>THEORETICAL</u> POINT OF VIEW?

1. Pupils who advance at their own learning rates should experience greater subject achievement.

2. Students can be assigned a performance level, which indicates their achievement rate.

3. Continuous progress related to a pupil's ability eliminates undue pressure and produces a relaxed learning environment conducive to good mental health.

4. The steady growth keeps the slow achieving student from becoming frustrated and continuously challenges the talented ones, thus eliminating many behavior problems.

5. Teaching under a non-graded plan is more challenging and satisfying.

True	Generally True	Undecided	Generally False	False

Exhibit 1

PLEASE CHECK THE APPROPRIATE COLUMN THAT, IN YOUR JUDGMENT, INDICATES HOW SUCCESSFUL THE PROGRAM HAS BEEN IN PRACTICE COMPARED TO YOUR EXPERIENCE IN A GRADED PROGRAM REGARDING:

	Much More Successful	More Successful	About the Same	Less Successful	Much Less Successful
1. Student initiative and independent study habits.					
a. for low achieving (remedial) pupils					
b. for below average achieving (goal 2) pupils					
c. for average achieving (goal 3) pupils					
d. for high achieving (goal 4) pupils					
2. Student achievement in your teaching area.					
a. for low achieving (remedial) pupils					
b. for below average achieving (goal 2) pupils					
c. for average achieving (goal 3) pupils					
d. for high achieving (goal 4) pupils					
3. The initial assignment of students to appropriate levels at the beginning of each semester.					
4. Flexibility regarding the reassignment of pupils when it seems advisable.					
5. Student self-confidence and feeling of self-worth.					
6. Pupil attitudes toward school in general.					
7. The cooperation of the class as a whole.					
8. The student's attention to his individual work.					
9. Your planning and communication with other staff members.					
10. Your feelings of accomplishment.					

What are the advantages of the non-graded program? Please List:_____

_____

_____

_____

_____

What are the disadvantages of the non-graded program? Please list:_____

_____

_____

_____

_____

In your opinion is the non-graded program a valuable addition to the junior high school program?

YES_____ NO_____ YES, WITH REVISIONS_____

If you answered NO or YES, WITH REVISION will you please indicate your reasons and your suggestions as to what should be done.

_____

_____

_____

_____

Please indicate:

_____ years at Will C. Wood

_____ years of total teaching experience.

_____ MALE _____ FEMALE

_____ DEPARTMENT _____ UNDERGRADUATE MAJOR